

YALE UNIVERSITY

DEPARTMENT OF MICROBIOLOGY

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Dear Josh:

I would like to correct my letter to you of the 15th. to the extent of saying that we have been able to confirm your results with one of our crosses. When I got your letter I examined the data we had on the two crosses we had made previously which involved the streptomycin resistant form derived from the Ms+ stock, and gave you the conclusions therefrom. It then occurred to me, however, that since we had not been looking for segregation of Ms+ from the resistant form that perhaps the inocula used in the scoring had not been adequate to pick up the <sup>Ms+</sup>latter, although they were suitable for distinguishing the normal from the resistant. On repeating the determinations with a more suitable inoculum we find that our conclusion about the substituted streptomycin still holds - the prototrophs all appear fully resistant to streptomycin. Since only about 15 were secured and tested we cannot exclude the possibility that Ms+ susceptible forms may not come up here in lower frequency.

Our data for the chloromycetin-resistant cross were not correct as I reported it to you, in that the retest clearly indicates 8 Ms+ prototrophs and 3 resistant forms out of the 11 prototrophs which appeared in 48 hours. On the second set which appeared only by 72 hours there were 7 resistant, 1 Ms+, and two which appeared to be in between; these latter are now being examined more quantitatively.

As I wrote you the other day, I don't want to restrict your investigation of this phenomenon in any way, and you should be all means go on with it. In view of your most interesting result I feel that we will want to give the problem more attention than we have, but in directions which won't conflict with yours. For the immediate present we therefore intend to look further into the specificity of the mutation -i.e., is it restricted to mutation to streptomycin resistance.

Our results with T3 are encouraging enough to warrant examination of the rest of the series, and also a wider range of antibiotics and a few other substances. Whatever the outcome here the data should be of value to you, and your data to us. I will keep you informed of results as we get them.

Sincerely yours,

*Peter*